Project Tracking No.: P-005-FY06-DAS

Return on Investment (ROI) Program Funding Application

This template was built using the ITD ROI Submission Intranet application.

FINAL AUDIT REQUIRED: The Enterprise Quality Assurance Office of the Information Technology Department is required to perform post implementation outcome audits for all Pooled Technology funded projects and may perform audits on other projects.

This is a Pooled Technology Fund Request. Amount of funding requested: <u>$365,000.00</u>

Section I: Proposal

Date:	7/13/2004
Agency Name:	Department of Administrative Services
Project Name:	DAS Billing and MIS
Agency Manager:	Patricia Harmeyer
Agency Manager Phone Number / E-Mail:	(515)281-7148 / patricia.harmeyer@iowa.gov
Executive Sponsor (Agency Director or Designee):	Denise Sturm

A. Project Summary

Describe the nature and use of the proposed project, including what is to be accomplished, how it will be accomplished, and what the costs and benefits will be.
Response:

Currently each DAS Enterprise uses different software and processes for billing. Each of the softwares are very limited in their features necessary to support our customers needs. DAS Customers need both billing and utilization information to help simplify their services billing and to better plan for services and costs. This project is divided into 3 sections and this ROI requests funds to support phase 3 of the project. DAS Finance group has been working with Customers in support of SAE, HRE, GSE, and ITE utility costing along with better definition of desired marketplace services. Additionally, DAS Finance group has been working with customers to better define what their needs are not only from a billing point of view but also in terms of management information. The results of these activities have shown a clear need for; 1. Better services definition with bills that match the defined services provided. 2. Simplified billing. Customers at different levels need information at different aggregation levels. Division Administrators need information summarized along funding streams and program boundaries while project managers need information at a far more detailed level. 3. Improved billing processes. 4. Ready access to information that enables them to project future costs in support of the State and Federal Legislative budget and outcomes processes. The costs involved in this project include personnel resources along with hardware, software and infrastructure resources. PHASE I of the project is currently underway. We are working with our customers to identify areas of deficiency and determine what improvements our customers need in our billing and utilization information. PHASE II involves prototyping solution(s) for customer analysis and feedback. There are currently many off-the-shelf products for billing and information management. This phase is designed to incorporate those features specified by management and customers to determine the optimum solution. DAS is working this phase of the project with a partner customer. PHASE III involves the implementation of the chosen solution. Our primary analysis shows that off-the-shelf options and internal design and development will cost roughly the same. Therefore, the funds requested should cover any eventual path chosen. The benefits to this project are; 1. Improved billing - Customers will have better billing that will directly tie to the DAS service catalog. Bills will be easier to understand at all levels of management. 2. Access to supporting data. Bills are predicated on levels of usage. The new system will enable customers to see actual levels of utilization and better manage how much service they are buying. 3. Forecasting. Customers and DAS Enterprise Managers will be able to forecast future services and utilization and project

what their future DAS related costs and prices will be. 4. Analysis. Better linking of information will enable better capacity planning by DAS while providing the information necessary to customers to determine costs and benefits of changing services, modifying levels of service, or the impact of future plans.

B. Strategic Plan

How does the proposed project fit into the strategic plan of the requesting agency?
Response:

This is a major strategic initiative by DAS. Over the last many years, our customers have looked to the enterprises for better information to help them plan their budgets and analyze the effeciency of the services used. While billing is the core element, there are many other strategic impacts of this program. 1. Unified billing and processes. With all enterprises using the same billing system, Customers will get information presented in a unified and standardized manner. 2. Support for unified key processes. There are many key business processes that cross the boundaries of the different DAS enterprises. For example, when a customer hires a new employee; they need access to different ITE systems, personnel files are created and updated, and they have accounting impacts. A unified system will allow DAS to present services along both existing program and enterprise sleeves but also present the opportunity for integrated service delivery based on business processes. 3. Entreprenurial Governement. DAS is challenged with providing only those services that customers want and will pay for. In order to effectively implement, our customers need access to information and systems that allow them to project costs and better manage the services they receive. Customers will be able to profile their projected needs over time - and adjust these profiles as their needs change. This profiling of services provides costing information while providing the basis for service capacity management. 4. Electronic Distribution. Many of the current invoices sent each month take stacks and stacks of paper. One major goal of the new system will be electronic delivery with drill down capability into the supporting detail. Customers who still need paper invoices will be able to recieve them, but in a much simplified format and at various levels of detail with access to the supporting data via the web.

C. Current Technology

Provide a summary of the technology used by the current system. How does the proposed project impact the agency's technological direction?
Response:

DAS Entprises all use different billing systems. None have information concerning utilization or service profiling readily available. Significant levels of analysis are required in order to provide customers with the information they need. The system with the most is the PACE billing system used by ITE. This system is very limited and requires significant amounts of personnel time each month to create customer invoices. Additionally, the current systems to not have the ability to provide supporting detail. For example, if a customer was billed for 10 e-mail accounts and wanted to verify who they were buying e-mail accounts for, they would have to request this data and an ITE technician would have to generate that information for them.

D. Statutory or Other Requirements

Is this project or expenditure necessary for compliance with a Federal law, rule, or order?
☑ YES (If "Yes", cite the specific Federal law, rule or order, with a short explanation of how this project is impacted by it.)
Explanation:
ITEs major customer, the Department of Human Services has embarked on a new vision for Medical Services. This initiative moves all medical services computer processing in-house on ITE equipment. With the current system, ITE is unable to readily provide DHS with the information they need to properly manage these contracts and the associated IT costs. As an internal service provider to a Federally funded program, ITE is required to provide significant amounts of information to Federal auditors concerning cost and utilization.

Is this project or expenditure required by state law, rule or order?
☐ YES (If "YES", cite the specific state law, rule or order, with a short explanation of how this project is impacted by it.)
Explanation:

Does this project or expenditure meet a health, safety or security requirement?
☐ YES (If "YES", explain.)
Explanation:

Is this project or expenditure necessary for compliance with an enterprise technology standard?
☑ YES (If "YES", cite the specific standard.)
Explanation:
This project moves a critical functional area within DAS to the enterprise goals defined by the Governor and Legislature relating to e-government.

[This section to be scored by application evaluator.]
Evaluation (20 Points Maximum)
If the answer to these criteria is "no," the point value is zero (0). Depending upon how directly a qualifying project or expenditure may relate to a particular requirement (federal mandate, state mandate, health-safety-security issue, or compliance with an enterprise technology standard), or satisfies more than one requirement (e.g. it is mandated by state and federal law and fulfills a health and safety mandate), 1-20 points awarded.

E. Impact on Iowa's Citizens

a. Project Participants

List the project participants (i.e. single agency, multiple agencies, State government enterprise, citizens, associations, or businesses, other levels of government, etc.) and provide commentary concerning the nature of participant involvement. Be sure to specify who and how many **direct** users the system will impact. Also specify whether the system will be of use to other interested parties: who they may be, how many people are estimated, and how they will use the system.
Response:

All DAS Customers will be involved from all DAS enterprises.

Department of Administrative Services Finance Division is the lead project partner. The solution will be owned by the Finance Division and maintained by the IT enterprise.

DAS/ITE - Technical partner.

Department of Human Services - DHS is ITEs largest customer and will be the partner customer for PHASE II. DHS Division of Data Management is tasked with ensuring all required information for Federal reporting concerning technical costs and services is available to support federal cost share reimbursements.

b. Service Improvements

Summarize the extent to which the project or expenditure improves service to Iowa citizens or within State government. Included would be such items as improving the quality of life, reducing the government hassle factor, providing enhanced services, improving work processes, etc.
Response:

This system will completely change the nature of services billing. While generating an invoice is the core outcome, this project will re-engineer all the involved dependant and supporting processes. This project will create a web-based service and project intake component, service authorization work flow, receive budget and expense data from I3, provide for cost analysis and service pricing, utilization data at various aggregations to support both customers and DAS executive management, support new service design, enable what-if scenario forecasting, and both service and financial modeling with actual data compared to planning data.

c. Citizen Impact

Summarize how the project leads to a more informed citizenry, facilitates accountability, and encourages participatory democracy. If this is an extension of another project, what has been the adopted rate of Iowa's citizens or government employees with the preceding project?
Response:

This is an internal re-engineering project in support of our Agency customers.

d. Public Health and/or Safety

Explain requirements or impact on the health and safety of the public.
Response:
This is an internal re-engineering project in support of our Agency customers.

[This section to be scored by application evaluator.]
Evaluation (10 Points Maximum)

- Minimally improves Customer Service (0-3 points).
- Moderately improves Customer Service (4-6 points).
- Significantly improves Customer Service (7-10 points).

[This section to be scored by application evaluator.]
Evaluation (15 Points Maximum)

- Minimally directly impacts Iowa citizens (0-5 points).
- Moderately directly impacts Iowa citizens (6-10 points).
- Significantly directly impacts Iowa citizens (11-15 points).

F. Process Reengineering

Provide a pre-project or pre-expenditure (before implementation) description of the impacted system or process. Be sure to include the procedures used to administer the impacted system or process and how citizens interact with the current system.
Response:
The current processes are very manual and complex. Each month, personnel must sift through volumes of data, making edits and adjustments in order to present a bill. The resulting bill supports only the function of moving money from our customers accounts to DAS accounts. All the current enterprise systems are deficient of readily available utilization information that would make the bills even remotely usuable from a management perspective.

Due to many of the existing processes, some services can not be billed in a timely manner, often billed in a month or two arrears. This makes fiscal year budget closeouts a nightmare for both the enterprises and our customers.

Provide a post-project or post-expenditure (after implementation) description of the impacted system or process. Be sure to include the procedures used to administer the impacted system or process and how

citizens will interact with the proposed system. In particular, note if the project or expenditure makes use of information technology in reengineering traditional government processes.

Response:

Upon implementation of this project (completion of all 3 phases) are processes will be simplified and will contain the following features;

1. Our customers will be able to understand the details of each enterprise service offering. The will know what the service is comprised of, what addition service options are available, the exact price for each service and option, and historical utilization.

2. Our customers will be able to profile their service needs. They will be able to see a historically-based projection that they can modifiy.

3. Our customers will be able to project their billings. From the customer profile, they will be able to see forecast billings and compare the forecast to the their actual bill.

4. Our customers will be able to see the detail. When a customer looks at line item for e-mail accounts, they will be able to click-drill into the detail to see a list of each e-mail account provided along with any options services attached to an account such as mail forwarding or increased e-mail data storage. Our customers gain three benefits; they can verify their billing, they can compare plan to actual with sufficient detail to understand any variances, and they can use the detail to modify their services.

5. Our customers will be able to accomplish trend analysis along several different axis; funding stream, program grouping, service category, or virtually any other way a customer needs to analyze their costs.

6. DAS will be able to track and trend service for patterns and make adjustments accordingly.

7. DAS will be able to profile new services, create forecasted demand, detail associated costs, and understand penetration rate requirements as a function of predicted price.

8. DAS will be able to better manage service costs. By relating costs directly and indirectly to services at the service line item level, DAS enterprises will be able to better manage the involved costs with a view of the impact on price. This provides better management opportunity to match cost ramps with utilization ramps.

[This section to be scored by application evaluator.]

<u>Evaluation</u> (10 Points Maximum)

- <u>Minimal</u> use of information technology to reengineer government processes (0-3 points).
- <u>Moderate</u> use of information technology to reengineer government processes (4-6 points).
- <u>Significant</u> use of information technology to reengineer government processes (7-10).

G. Timeline

Provide a projected timeline for this project. Include such items as planning, database design, coding, implementation, testing, conversion, parallel installation, and date of final release. Also include the parties responsible for each item.

Response:

[This section to be scored by application evaluator.]

<u>Evaluation</u> (5 Points Maximum)

- The timeline contains several problem areas (0-2 points)
- The timeline seems reasonable with few problem areas (3-4 points)
- The timeline seems reasonable with no problem areas (5)

H. Funding Requirements

On a fiscal year basis, enter the estimated cost by funding source: Be sure to include developmental costs and ongoing costs, such as those for hosting the site, maintenance, upgrades, ...

	FY06		FY07		FY08	
	Cost($)	% Total Cost	Cost($)	% Total Cost	Cost($)	% Total Cost
State General Fund	$175,000	32%	$125,000	100%	$135,000	100%
Pooled Tech. Fund /IowAccess Fund	$365,000	68%	$0	0%	$0	0%
Federal Funds	$0	0%	$0	0%	$0	0%
Local Gov. Funds	$0	0%	$0	0%	$0	0%
Grant or Private Funds	$0	0%	$0	0%	$0	0%
Other Funds (Specify)	$0	0%	$0	0%	$0	0%
Total Project Cost	$540,000	100%	$125,000	100%	$135,000	100%
Non-Pooled Tech. Total	$175,000	32%	$125,000	100%	$135,000	100%

[This section to be scored by application evaluator.]

<u>Evaluation</u> **(10 Points Maximum)**

- The funding request contains questionable items (0-3 points)
- The funding request seems reasonable with few questionable items (4-6 points)
- The funding request seems reasonable with no problem areas (7-10)

I. Scope

Is this project the first part of a future, larger project?
☐ YES (If "YES", explain.) ☑ NO, it is a stand-alone project.
Explanation:

Is this project a continuation of a previously begun project?
☑ YES (If "YES", explain.)
Explanation:
The entirety of the project is a single, stand-alone project. However, the ROI funds request is for PHASE III of the project plan.

J. Source of Funds

On a fiscal year basis, how much of the total project cost ($ amount and %) would be <u>absorbed</u> by your agency from non-Pooled Technology and/or IOWAccess funds? If desired, provide additional comment / response below.
Response:
DAS is absorbing the majority of personnel costs for the project which totals $175,000 and 33% of the project costs. DAS will integrate the operational and support costs as part of DAS Finance Division and each of the DAS enteprises supported.

[This section to be scored by application evaluator.]

<u>Evaluation</u> **(5 Points Maximum)**

- 0% (0 points)
- 1%-12% (1 point)
- 13%-25% (2 points)
- 25%-38% (3 points)
- 39%-50% (4 points)
- Over 50% (5 points)

Section II: Financial Analysis

A. Project Budget Table

It is necessary to <u>estimate and assign</u> a useful life figure to <u>each</u> cost identified in the project budget. Useful life is the amount of time that project related equipment, products, or services are utilized before they are updated or replaced. In general, the useful life of hardware is three (3) years and the useful life of software is four (4) years. Depending upon the nature of the expense, the useful life for other project costs will vary between one (1) and four (4) years. On an exception basis, the useful life of individual project elements or the project as a whole may exceed four (4) years. Additionally, the ROI calculation must include all <u>new</u> annual ongoing costs that are project related.

The Total Annual Prorated Cost (State Share) will be calculated based on the following equation:

$$\left[\left(\frac{Budget\ Amount}{Useful\ Life}\right)\times \% \ State\ Share\right]+\left(Annual\ Ongoing\ Cost\times \% \ State\ Share\right)=Annual\ Prorated\ Cost$$

Budget Line Items	Budget Amount (1st Year Cost)	Useful Life (Years)	% State Share	Annual Ongoing Cost (After 1st Year)	% State Share	Annual Prorated Cost
Agency Staff	$175,000	4	75.00%	$60,000	75.00%	$77,813
Software	$100,000	4	75.00%	$10,000	75.00%	$26,250
Hardware	$35,000	4	75.00%	$6,500	75.00%	$11,438
Training	$15,000	4	75.00%	$0	0.00%	$2,813
Facilities	$0	1	0.00%	$0	0.00%	$0
Professional Services	$200,000	4	75.00%	$0	0.00%	$37,500
ITD Services	$35,000	4	75.00%	$145,000	75.00%	$115,313
Supplies, Maint, etc.	$0	1	0.00%	$0	0.00%	$0
Other	$0	1	0.00%	$0	0.00%	$0
Totals	$560,000	---	---	$221,500	---	$271,125

B. Spending Plan

Explain how the funds will be allocated.

Response:

All funds will be used for development only. Depending on which solution is implemented, the total cost is anticipated to be the same but the grouping of costs may change.

C. Tangible and/or Intangible Benefits

Respond to the following and transfer data to the ROI Financial Worksheet as necessary:

1. Annual Pre-Project Cost - This section should be completed only if state government operations costs are expected to be reduced as a result of project implementation. **Quantify actual state government direct and indirect costs** (personnel, support, equipment, etc.) associated with the activity, system or process <u>prior to </u>project implementation.
Describe Annual Pre-Project Cost:
Currently, a large percentage of billing activity is manual and all utilization information generation and analysis is manual. For planning purposes, this ROI will calculate the projected before and after for ITE only and then to be conservative, these costs will only be doubled even though they are incurred by all 4 DAS enterprises along with the Finance Division within DAS Core.

Manual time involved with invoice generation: 40 hrs/month at $40 per hour salary and benefits = $19,200. This is extremely conservative and the full manual impact is more like 2 people full time. The new system will include enhanced personnel time reporting for more accurate cost assignments.
Researching Customer billing Questions: 65 hrs/month at $40 per hour = $31,200.
Customer Service adjustments - adding, deleting, changing - 172 hours per month at $40 per hour = $82,560.
Providing historical utilization information - when able to accomplish - $25,000.
PACE system support = $135,000 Net of costs to support new system.
PACE mainframe utilization costs = $78,000
Paper for Invoices = $27,000

These costs are just a few of those involved and are presented as the costs which will be eliminated. Additionally, for conservatism, the state share is adjusted for the federal funding impact of ITEs major customer, DHS.

Quantify Annual Pre-Project Cost:

	State Total
FTE Cost (salary plus benefits):	$380,848.00
Support Cost (i.e. office supplies, telephone, pagers, travel, etc.):	$35,100.00
Other Cost (expense items other than FTEs & support costs, i.e. indirect costs if applicable, etc.):	$0.00
Total Annual Pre-Project Cost:	$517,348.00

2. Annual Post-Project Cost - This section should be completed only if state government operations costs are expected to be reduced as a result of project implementation. **Quantify actual state government direct and indirect costs** (personnel, support, equipment, etc.) associated with the activity, system or process <u>after </u>project implementation.
Describe Annual Post-Project Cost:
The above costs represent projected cost reductions.

Quantify Annual Post-Project Cost:

	State Total
FTE Cost (salary plus benefits):	$0.00
Support Cost (i.e. office supplies, telephone, pagers, travel, etc.):	$0.00
Other Cost (expense items other than FTEs & support costs, i.e. indirect costs if applicable, etc.):	$0.00
Total Annual Post-Project Cost:	$0.00

3. Citizen Benefit - Quantify the estimated annual value of the project to Iowa citizens. This includes the "hard cost" value of avoiding expenses ("hidden taxes") related to conducting business with State government. These expenses may be of a personal or business nature. They could be related to transportation, the time expended on or waiting for the manual processing of governmental paperwork such as licenses or applications, taking time off work, mailing, or other similar expenses. As a "rule of thumb," use a value of $10 per hour for citizen time.

Describe savings justification:

Transaction Savings

Number of annual online transactions:	0
Hours saved/transaction:	0
Number of Citizens affected:	0
Value of Citizen Hour	0
Total Transaction Savings:	$0
Other Savings (Describe)	$0
Total Savings:	$0

4. Opportunity Value/Risk or Loss avoidance - Quantify the estimated annual <u>non-operations</u> benefit to State government. This could include such items as qualifying for additional matching funds, avoiding the loss of matching funds, avoiding program penalties/sanctions or interest charges, avoiding risks to health/security/safety, avoiding the consequences of not complying with State or Federal laws, providing enhanced services, avoiding the consequences of not complying with enterprise technology standards, etc.

Response:

5. Benefits Not Readily Quantifiable - List and summarize the overall non-quantifiable benefits (i.e., IT innovation, unique system application, utilization of new technology, hidden taxes, improving the quality of life, reducing the government hassle factor, meeting a strategic goal, etc.).
Response:
Perhaps the biggest benefit is a non-qunatifiable benefit - The ability for our customers to track utilization and plan future costs based on actual service requirements.

ROI Financial Worksheet	
A. Total Annual Pre-Project cost (State Share from Section II C1):	$517,348
B. Total Annual Post-Project cost (State Share from Section II C2):	$0
State Government Benefit (= A-B):	$517,348
Annual Benefit Summary:	$517,348
State Government Benefit:	$517,348
Citizen Benefit:	$0
Opportunity Value or Risk/Loss Avoidance Benefit:	$0
C. Total Annual Project Benefit:	$517,348
D. Annual Prorated Cost (From Budget Table):	$271,125
Benefit / Cost Ratio: (C/D) =	1.91
Return On Investment (ROI): ((C-D) / Requested Project Funds) * 100 =	67.46%

[This section to be scored by application evaluator.]

<u>**Evaluation**</u> **(25 Points Maximum)**

- The financial analysis contains several questionable entries and provides minimal financial benefit to citizens (0-8 points).
- The financial analysis seems reasonable with few questionable entries and provides a moderate financial benefit to citizens (9-16 points).
- The financial analysis seems reasonable with no problem areas and provides maximum financial benefit to citizens (17-25).

Note: For projects where no State Government Benefit, Citizen Benefit, or Opportunity Value or Risk/Loss Avoidance Benefit is created due to the nature of the project, the Benefit/Cost Ratio and Return on Investment values are set to Zero.

Appendix A. Auditable Outcome Measures

For each of the following categories, list the auditable metrics for success after implementation and identify how they will be measured.

1. Improved customer service
Customer rating and feeback.

2. Citizen impact
Not Applicable

3. Cost Savings
Cost per invoice generation.

4. Project reengineering
Manual time reduction in billing processes.

5. Source of funds (Budget %)
Not Applicable

6. Tangible/Intangible benefits
Number of customers profiling future services.

Return